

IN THE CLAIMS

Please amend the claims as follows:

1. (previously amended) A voltage converter comprising:

a first power supply circuit capable of converting an input voltage to an output voltage;

a second power supply circuit capable of converting said input voltage to said output voltage, wherein said second power supply circuit is connected in parallel with said first power supply circuit; and

means for providing a control signal to activate either said first power supply circuit or said second power supply circuit to convert said input voltage to said output voltage based on a load demand on said voltage converter.

2. (previously amended) The voltage converter of Claim 1, wherein said first power supply circuit is a series power supply circuit, and said second power supply circuit is a switching power supply circuit.

3. (previously amended) The voltage converter of Claim 1, wherein said first power supply circuit has a relatively high conversion efficiency during a low load demand, and said second power supply circuit has a relatively high conversion efficiency during a high load demand.

4. (previously amended) The voltage converter of Claim 1, wherein said first power supply is activated by said control signal when said load demand on said voltage converter is low, wherein said second power supply is activated by said control signal when said load demand on said voltage converter is high.

5. (previously amended) The voltage converter of Claim 1, wherein said load demand on said voltage converter is low when said voltage converter is in a suspended state, wherein said load demand on said voltage converter is high when said voltage converter is in a non-suspended state.

6. (currently amended) A voltage converter comprising:

a first power supply circuit capable of converting an input voltage to an output voltage;

a second power supply circuit capable of converting said input voltage to said output voltage, wherein said second power supply circuit is connected in parallel with said first power supply circuit; and

a detecting circuit for activating either said first power supply circuit to said second power supply circuit to convert said input voltage to said output voltage based on an amount of current supplying supplied to said first and second power supply circuits.

7. (previously amended) The voltage converter of Claim 6, wherein said first power supply circuit is a series power supply circuit, and said second power supply circuit is a switching power supply circuit.

8. (previously amended) The voltage converter of Claim 6, wherein said first power supply circuit has a relatively high conversion efficiency during a low load demand, and said second power supply circuit has a relatively high conversion efficiency during a high load demand.

9. (previously amended) The voltage converter of Claim 6, wherein said first power supply is activated by said detecting circuit when said current amount is below a predetermined value, wherein said second power supply is activated by said detecting circuit when said current amount exceeds said predetermined value.

10. (previously amended) The voltage converter of Claim 6, wherein said current amount is below a predetermined value when said voltage converter is in a suspended state, wherein said current amount exceeds said predetermined value when said voltage converter is in a non-suspended state.

11. (original) The voltage converter of Claim 1, wherein said first and second power supply circuits share a common voltage input and a common voltage output.

12. (original) The voltage converter of Claim 6, wherein said first and second power supply circuits share a common voltage input and a common voltage output.

13. (original) The voltage converter of Claim 6, wherein said detecting circuit includes a current sense amplifier coupled to a power input line for said first and second power supply circuits.